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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,463	09/08/2003	Makarand Gadre	MSI-1596US	9824
22801 7590 04/12/2007 LEE & HAYES PLLC 421 W RIVERSIDE AVENUE SUITE 500 SPOKANE, WA 99201			EXAMINER WEI, ZHENG	
			ART UNIT	PAPER NUMBER
			2192	

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	04/12/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 04/12/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

lhptoms@leehayes.com

Office Action Summary

Application No.

10/657,463

Applicant(s)

GADRE, MAKARAND

Examiner

Zheng Wei

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.138(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>09/08/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to the application filed on 09/08/2003.
2. Claims 1-54 are pending and have been examined.

Oath/Declaration

3. The Office acknowledges receipt of a properly signed oath/declaration filed on September 08, 2003.

Priority

4. The priority date considered for this application is September 08, 2003.

Information Disclosure Statement

5. The information disclosure statements filed 09/08/2003 has been placed in the application file and the information referred to therein has been considered

Specification

6. The disclosure is objected to because of the following informalities:
The cross-reference application status needs to be updated in section CROSS-REFERENCE TO RELATED APPLICATIONS.
Appropriate correction is required.

Drawings

7. The drawings filed on September 08, 2003 are accepted by the Examiner.

Double Patenting

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an

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invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Claims 1, 13 and 18 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 12 and 23 of copending Application No. 10/657,468. Although the conflicting claims are not identical, they are not patentably distinct from each other. As can be seen from the table below, instant claims and the claims of copending application are directed to the same subject matter of the invention. For example,

Instant Application 10/657,463	Copending Application 10/657,468
<p><u>Claim 1.</u> A method of generating common intermediate language code comprising:</p> <p>receiving a portion of JAVA.TM. language source code referencing a first class having a definition that is uniformly applicable to a plurality of classes associated with the first class, the source code identifying one of the plurality of associated classes; and</p> <p>generating language-neutral intermediate language code</p>	<p><u>Claim 1.</u> A method of generating common intermediate language code comprising:</p> <p>writing first JAVA.TM. language source code that comprises a definition of a generic class usable in a framework; generating an instance of the generic class; and</p> <p>compiling the instance of the generic class into common intermediate language</p>

representing the portion of source code.	code executable by a runtime engine.
<p><u>Claim 13.</u> A method of compiling comprising:</p> <p>receiving a portion of JAVA.TM. language software having a declaration of an instance of a generic class; parsing the declaration into a token corresponding to the generic class; and</p> <p>creating an intermediate language code block corresponding to the parsed declaration, the intermediate language code block executable by a runtime engine.</p>	<p><u>Claim 12.</u> A method of using a generic class comprising:</p> <p>adapting existing JAVA.TM. source code to include a declaration of a first generic class provided by a software package having a class definition of the first generic class; and</p> <p>compiling the adapted JAVA.TM. source code with the class definition to generate common intermediate language code</p>
<p><u>Claim 18.</u> A computer-readable medium having stored thereon computer-executable instructions for performing a method of compiling comprising:</p> <p>receiving a portion of JAVA.TM. language software including an instruction that references a generic class of a specified type;</p> <p>creating a parse tree having a generic class identifier associated with the generic class and type identifier associated with the specified type; and generating one or more intermediate language instructions representing the JAVA.TM. M language instruction based on the parse tree.</p>	<p><u>Claim 23.</u> A computer-readable medium having stored thereon microprocessor-executable instructions for performing a method comprising:</p> <p>receiving input representing a generic class definition in a JAVA.TM. language; receiving source code that references the generic class; and</p> <p>compiling the source code with an instance of the generic class into common intermediate language code executable by a runtime engine.</p>

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 101

10. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

11. Claims 25-30 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 25:

Claim 25 claims a computer-readable medium having stored thereon a data structure for use by a compiler, wherein the data structure is only the input data for the compiler and data structure itself can not be executed by the computer and cause the computer to perform certain functions. Therefore the data structure can be interpreted as pure data or computer program listings per se. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer, which permit the computer program's functionality to be realized. Thus, they are not statutory.

See M.P.E.P. 2106.01 (I)

Claims 26-30:

Claims 26-30, depend from claim 25, do not remedy the deficiencies as noted above, thus are also rejected under 35 U.S.C. 101 for the same reasons.

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

13. Claims 1-10, 13-17, 36-45 and 50 are rejected under 35 U.S.C. 102(e) as being anticipated by Hostetter (Hostetter et al., US 2005/0060695 A1)

Claim 1:

Hostetter discloses a method of generating common intermediate language code comprising:

- receiving a portion of JAVA.TM. language source code referencing a first class having a definition that is uniformly applicable to a plurality of classes associated with the first class, the source code identifying one of the plurality of associated classes (see for example, Fig.5, step 2020 "Read Instruction

From Program Code” and related text; also see p.2, [0016]-[0017], “Java programming language”, “template generated class”); and

- generating language-neutral intermediate language code representing the portion of source code (see for example, Fig.5, step 2045, 2075, “Compile” and related text).

Claim 2:

Hostetter further discloses a method as recited in claim 1 further comprising parsing the portion of the source code into a parse tree representing the source code (see for example, Fig.5, step 2045, 2075, “Compile” and related text; also see p.2, [0024], [0026], “The runtime compiler is invoked...”).

Claim 3:

Hostetter also discloses a method as recited in claim 2 further comprising nesting a constructed class of the first class in the parse tree (see for example, p.2, [0022] “(2) creating a representation of the template-generated class...”).

Claim 4:

Hostetter further discloses a method as recited in claim 1 further comprising:

- generating a parse tree having a token referencing the first class and a token referencing the specified one of the plurality of associated classes (see for example, Fig.5, step 2045, 2075, “Compile”; also see p.2 [0024]); and

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- semantically analyzing the parse tree to determine validity of semantics of the first class (see for example, Fig.5, step 2085, "Compiler Error"; also see, p.6, [0090], "the compiler notifies the software programmer or end user of the compilation error...").

Claim 5:

Hostetter also discloses a method as recited in claim 4 wherein the semantically analyzing comprises determining whether operations applied to the first class are valid (see for example, Fig.5, step 2085, "Compiler Error"; also see, p.6, [0090], "the compiler notifies the software programmer or end user of the compilation error...").

Claim 6:

Hostetter further discloses a method as recited in claim 1 further comprising generating metadata descriptive of the first class (see for example, Fig.2, step 1020, "Create Method Bindings for Class Representation" and related text; also see p.4, [0055], "A method binding is an object that stores information about a class method").

Claim 7:

Hostetter also discloses a method as recited in claim 6 further comprising storing the metadata with the language-neutral intermediate language code, whereby the

language-neutral intermediate language code may be used by an application program (see for example, Fig.2, step 1010, "Create object Representation of Template-Generated Class" and related text; also see, p.4, [0053], "template representation").

Claim 8:

Hostetter further discloses a method as recited in claim 1 further comprising creating a compiled project (see for example, Fig.2, step 1020, 1030, "Compile"; also see p.4, [0054], "compilation") including the language-neutral intermediate language code (see for example, Fig.2, step 1010, "Create object Representation of Template-Generated Class" and related text; also see, p.4, [0053], "template representation") and metadata descriptive of the first class and the specified one of the plurality of associated classes (see for example, Fig.2, step 1020, "Create Method Bindings for Class Representation" and related text; also see p.4, [0055], "A method binding is an object that stores information about a class method").

Claim 9:

Hostetter further discloses a method as recited in claim 1 further comprising executing the language-neutral intermediate language code with a runtime engine (see for example, p.4, [0054], "executable code").

Claim 10:

Hostetter also discloses a method as recited in claim 1 further comprising developing the portion of source code in a framework that provides the definition of the first class (see for example, p.3, [0050], "source code defining the class template is compiled into an object representation..."; also see p.4, [0053], "source code declaring a class based on the class template representation").

Claim 13:

Hostetter discloses a method of compiling comprising:

- receiving a portion of JAVA.TM. language software having a declaration of an instance of a generic class (see for example, p.2, [0016], "add class templates to the Java programming language"; p.2, [0018], "creating a representation of the class template");
- parsing the declaration into a token corresponding to the generic class (see for example, p.2, [0024] "requires compilation"); and
- creating an intermediate language code block corresponding to the parsed declaration, the intermediate language code block executable by a runtime engine (see for example, p.3, [0051] "some type of intermediate code").

Claim 14:

Hostetter discloses a method as recited in claim 13 further comprising associating the declaration of the instance of the generic class with a defined generic class in a generic class library (see for example, p.5, [0069], "The

ClassTemplate provides source code representations"; also see p.5, [0071],
"When the compiler encounters in the program code a variable declaration in
which the declared type is a template-generated class").

Claim 15:

Hostetter also discloses a method as recited in claim 14 further comprising
tokenizing a parse tree with an identifier corresponding to the defined generic
class, the parse tree comprising a hierarchical representation of the declaration
(see for example, Fig.4B, element 222 "identifier"; also see p.5, [0077]).

Claim 16:

Hostetter discloses a method as recited in claim 13 further comprising creating
metadata describing the portion of the JAVA.TM. language software (see for
example, p.4, [0055], "A method binding is an object that stores information
about a class method").

Claim 17:

Hostetter discloses a method as recited in claim 14 further comprising validating
an operation on the instance of the generic class based on the defined generic
class (see for example, Fig.5, step 2085, "Compiler Error"; also see, p.6, [0090],
"the compiler notifies the software programmer or end user of the compilation
error...").

Claim 36:

Hostetter discloses a method of generating microprocessor-executable code comprising:

- receiving a portion of source code written in a language for which generic classes are unspecified, the portion of source code including a generic class declaration declaring a generic class, the generic class declaration including at least one associated class reference defining a constructed class of the generic class (see for example, p.2, [0016], "add class templates to the Java programming language"; p.2, [0018], "creating a representation of the class template"); and
- generating a module having microprocessor-executable instructions corresponding to the constructed class, (see for example, p.4, [0054], "executable code"), the module further having metadata describing the constructed class (see for example, p.4, [0055], "A method binding is an object that stores information about a class method").

Claim 37:

Hostetter further discloses a method as recited in claim 36 wherein the microprocessor-executable instructions comprise intermediate language instructions (see for example, .p.3, [0051] "some type of intermediate code").

Claim 38:

Hostetter also discloses a method as recited in claim 36 wherein the microprocessor-executable instructions comprise Microsoft.TM. Intermediate Language instructions (see for example, .p.3, [0051] "some type of intermediate code").

Claim 39:

Hostetter also discloses a method as recited in claim 36 wherein the metadata comprises at least one of:

- method information indicating one or more methods implemented by the constructed class (see for example, p.4, [0055], "A method binding is an object that stores information about a class method");

Claim 40:

Hostetter discloses a method of compiling comprising:

- receiving a portion of source code written in a language for which generic classes are unspecified in a formal language specification, the portion of source code including a first class reference having at least one associated class reference referencing a class associated with the first class (see for example, Fig.5, step 2020 "Read Instruction From Program Code" and related

text; also see p.2, [0016]-[0017], "Java programming language", "template generated class"); and

- generating an intermediate language representation of the portion of source code, the intermediate representation having an instance of the first class and an instance of the at least one associated class (see for example, Fig.5, step 2045, 2075, "Compile" and related text; also see p.5, [0071], "template-generated class representation, an object representation of the template-generated class in memory").

Claim 41:

Hostetter further discloses a method as recited in claim 40 wherein the first class is a generic class (see for example, Fig.2, step 1000, "Create Object Representation of Class Template").

Claim 42:

Hostetter also discloses a method as recited in claim 40 wherein the language is a JAVA.TM. language (see for example, p.2, [0016], "java programming language").

Claim 43:

Hostetter also discloses a method as recited in claim 40 further comprising validating the type based on a definition of the first class (see for example, Fig.5,

step 2085, "Compiler Error"; also see, p.6, [0090], "the compiler notifies the software programmer or end user of the compilation error...").

Claim 44:

Hostetter discloses a method as recited in claim 43 further comprising validating an operation on the first class based on a definition of the first class (see for example, Fig.5, step 2085, "Compiler Error"; also see, p.6, [0090], "the compiler notifies the software programmer or end user of the compilation error...").

Claim 45:

Hostetter also discloses a method as recited in claim 40 further comprising interpreting the intermediate representation for execution by a microprocessor (see for example, p.3, [0051] "some type of intermediate code"; also see p.4, [0054], "executable code").

Claim 50:

Hostetter further discloses a method as recited in claim 40 wherein the at least one associated class reference includes one or more nested generic class references (see for example, p.6, [0099] "other classes or class templates are inherited").

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hostetter (Hostetter et al., US 2005/0060695 A1) in view of Lurie (Johnthan Lurie, Product Snapshot: J#, J# provides Java develops a key for entering the .Net platform).

Claims 11-12:

Hostetter discloses a method as recited in claim 10 wherein the framework, but does not explicitly disclose the framework is a .NET.TM. Framework. However, Lurie in the same analogous art of Java programming discloses Visual J#.Net Framework (see for example, p.1, first paragraph, "Visual J#.Net is Microsoft's Java development tool for the .Net Framework") Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use Visual J# to implement/perform above method is claim 10. One would have been motivated to do so to take advantage of rich APIs offered by the .Net Framework to perform similar tasks as suggested by Lurie (see for example, p.1, third paragraph)

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16. Claims 18-24, 25-30 and 51-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hostetter (Hostetter et al., US 2005/0060695 A1)

Claims 18-24:

Claims 18-24 are a computer product version of claimed method as discussed in claim 1-9 above, wherein all claimed limitations have been address and/or set forth in claims 1-9. It is well known in the computer art that claimed method can be stored and/or exercised on the computer-readable medium. Therefore, as the references teach all the limitation of claims 1-9, they also teach the limitations of claims 18-24. Thus, they also would have been obvious.

Claims 25-30:

Claims 25-30 are a computer product version of claimed method as discussed in claims 40-50 above, wherein all claimed limitations have been address and/or set forth in claims 40-50. It is well known in the computer art that claimed methods could be stored and/or exercised on the computer-readable medium. Therefore, as the references teach all the limitation of claims 40-50, they also teach the limitations of claims 40-50. Thus, they also would have been obvious.

Claims 51-54:

Claims 51-54 are a system version of claimed methods as discussed in claims 40-5- above, wherein all claimed limitations have been address and/or set forth in claims 40-50. Therefore, as the references teach all the limitation of claims 40-

50, they also teach the limitations of claims 40-50. Thus, they also would have been obvious.

17. Claims 18-24, 25-30 and 51-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hostetter (Hostetter et al., US 2005/0060695 A1) in view of APA (Admitted Prior Art, BACKGROUND section of the specification, [0003]-[0005])

Claim 31:

Hostetter discloses a method for compiling comprising:

- receiving a portion of source code in a Java language having a declaration of an instance of a generic class (see for example, p.2, [0016], "add class templates to the Java programming language"; p.2, [0018], "creating a representation of the class template");
- parsing the portion into a parse tree having an instance of a first type having at least one instance of an associated type (see for example, p.2, [0024] "requires compilation"); and
- generating an intermediate representation of the parse tree engine (see for example, p.3, [0051] "some type of intermediate code").

But does not explicitly disclose the generic class is .NET generic type are not specified in a formal definition of the language. However, APA discloses that formal specifications for some languages, such as Java language, do not specify generic classes and .Net may provide generic class in framework (see for

example, p.1, [0005]). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use and compile .Net generic class in Hostetter's teachings. One would have been motivated to do so to take full advantage of the .Net Framework to perform similar tasks as suggested by APA (see for example, p.1, [0005])

Claim 32:

Hostetter and APA disclose the method as recited in claim 31, Hostetter further discloses the method comprising importing metadata describing the first class and the at least one instance of the associated class (see for example, p.4, [0055], "A method binding is an object that stores information about a class method").

Claim 33:

Hostetter also discloses the method as recited in claim 31 further comprising tokenizing the parse tree with a token corresponding to the generic type (see for example, p.2, [0024] "The process for generating method bindings...").

Claim 34:

Hostetter also discloses the method as recited in claim 33 further comprising tokenizing the parse tree with at least one token corresponding to the at least one instance of the associated type (see for example, p.2, [0024] "The process for

generating method bindings...")

Claim 35:

Hostetter and APA disclose the method as recited in claim 31 wherein the generic type is a NET.TM. generic class (see for example, APA , p.1, [0005]).

18. Claims 46-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hostetter (Hostetter et al., US 2005/0060695 A1) in view of Allen (Eric Allen Diagnosing Java code: Java generics without the pain, part1, part2)

Claim 46:

Hostetter discloses a method as recited in claim 40, but does not explicitly disclose angular brackets surround the at least one associated class reference. However, Allen in the same analogous art of Java generics discloses the angular brackets surround the at least one associated class reference (see for example, p.3, example code with "<>"). It is well known in the computer art that angular bracket is used to define template or generics class.

Claim 47:

Hostetter discloses a method as recited in claim 40 and also disclose a linked list (see for example, p.5, [0075], bindings are stored in the ClassObject as elements of a linked list), but does not explicitly disclose the first class is a Queue class.

However, it is well known in the computer art that Queue class is included in the .Net Class library to represents a first-in, first-out collection of objects. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use queue class to implement. One would have been motivated to do so to implement the bindings using framework provided existing queue class.

Claims 48-49:

Hostetter discloses a method as recited in claim 47, but does not explicitly disclose at least one associated class comprises at least one of:

- an int type;
- a string type; and
- a Queue type.

However, Allen in the same analogous art of Java generics discloses generic types (see for example, p.2-3, section "Generic types to the rescue", Listing4. "Referencing type parameters like ordinary types and example code <string>, <integer>). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use generic types to define generic class. One would have been motivated to do so to eliminate casts as suggested by Allen (see for example, p.2, section "Generic types to the rescue", a natural way to eliminate casts like the one above is to argument the Java type system").

Conclusion

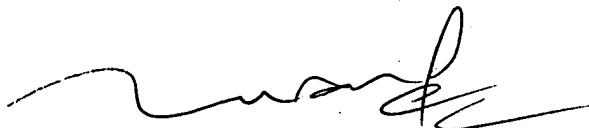
19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- Brian Freyburger (US 6,405,368) discloses a method for separate compilation of templates.
 - David Stoutamire (US 6,018,628) discloses a method of implementing parameterized types to be compatible with existing unparameterized libraries
 - Eyal Alaluf (2004/0230958) discloses a compiler and software product for compiling intermediate languages bytecode into Java Bytecode.
20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zheng Wei whose telephone number is (571) 270-1059 and Fax number is (571) 270-02059. The examiner can normally be reached on Monday-Thursday 8:00-15:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is 571- 272-1000.

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